Lower Spirit Mt. Riverfront Park Site Plan

Presented to Parks Commission January 10, 2018

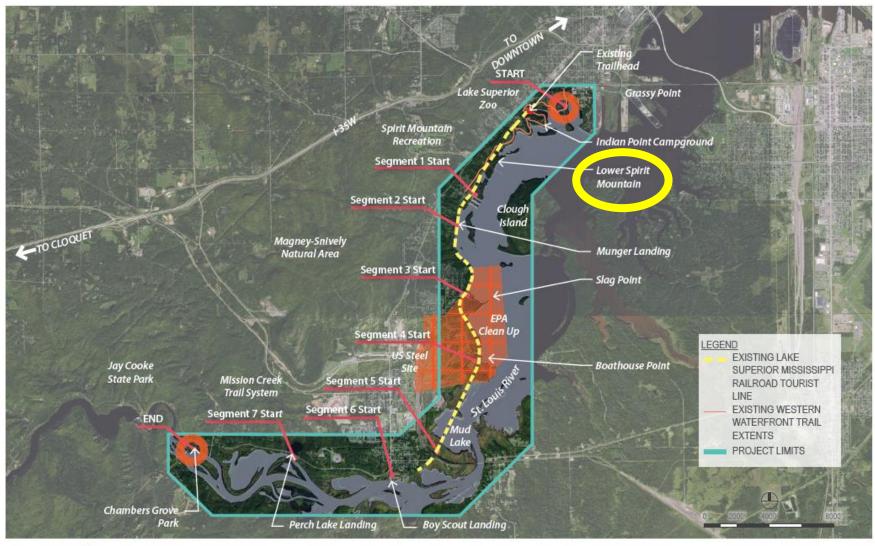


Figure 1.12 Overall Project Limits

Community Engagement

39-member Stakeholder Committee

The level of community engagement efforts was uniquely diverse and widespread. The City convened a group of stakeholders made up of regulation agencies, business owners, community/neighborhood leaders, elected officials/City staff, and environmental and recreation groups.

A series of five, 3-hour Stakeholder Committee meetings occurred Sept. '16 — Jan. '17:

- 1. Interpretation and branding to better reflect the heritage of the river corridor
- 2. Riverfront green spaces Slag Point, Lower Spirit Mt. Riverfront Park
- 3. St. Louis River access and put-in sites Munger Landing, Boy Scout Landing, Perch Lake Landing
- 4. Initial trail extension and rail options
- 5. Exploring further River-friendly with Upland Trail, Rail-to-Trail Conversion and full Rail-and Trail

Public Meetings

Two public meetings were held during the planning process. The first public meeting was held on November 15, 2016 and attended by approximately 60 people. At the meeting the City shared the scope of the Plan, and some of the options that were currently being studied by the design team.

The second meeting was held on June 13, 2017. Nearly 100 people attended the meeting where the City shared the recommended trail extension alignment and other riverfront improvements.

Online Survey

A typical practice of the City of Duluth Parks & Rec planning process, the City administered a voluntary online survey. From January 9-26, 2017. It featured 29 questions and had a total of 988 responses. The survey was developed by LHB and administered through the City of Duluth's website.

Randomly sampled survey of the 5th District of Duluth

Telephone interviews were conducted with 440 adult residents of Council District 5, Precincts 28 – 34 in Duluth, Minnesota completed between February 3 and February 5, 2017. The survey was developed and administered by Zenith Research Group







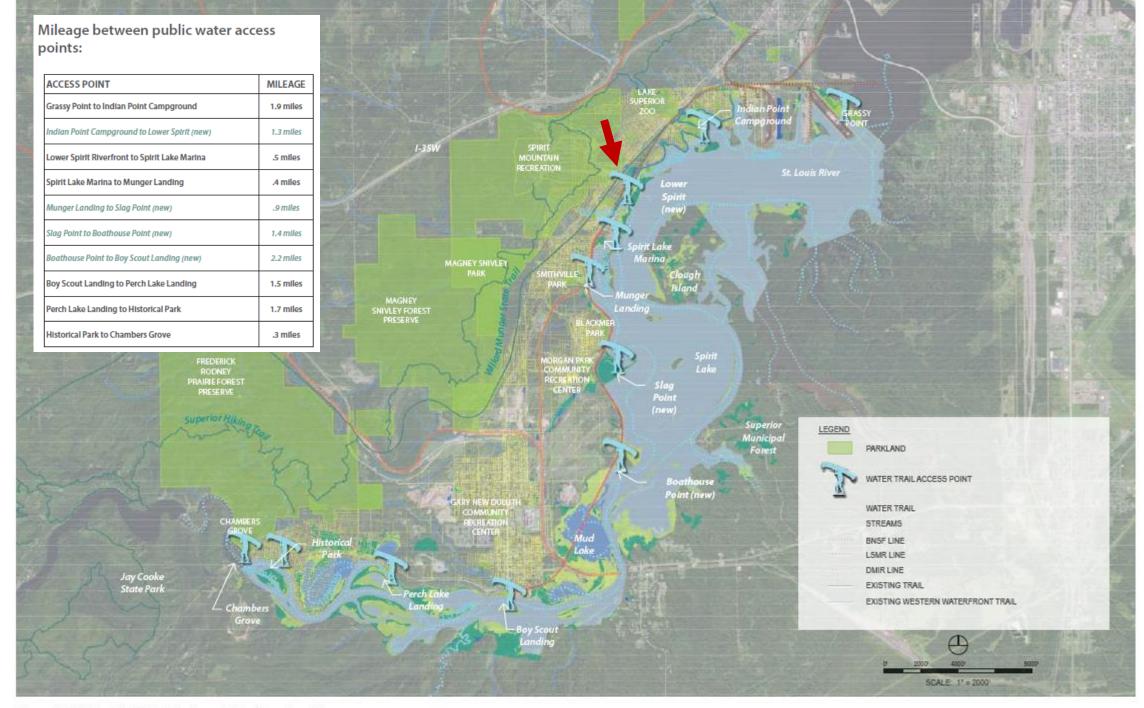


Figure 1.45 Water Trail & Public Access Sites Overview Map

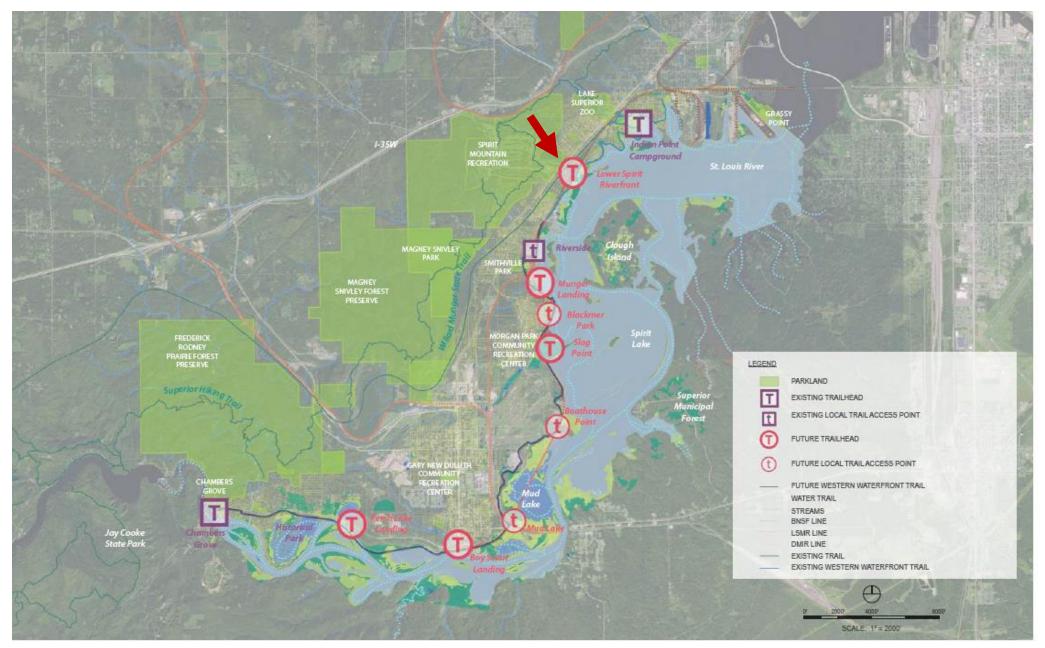


Figure 1.46 Trailheads & Local Trail Access Points Overview Map

Stars below represent the recommended public access and linear park amenities made through the community engagement process that can be met through the Lower Spirit Mountain Riverfront Access

envisioned the trail, linear park, and public access site to look and feel. The design team facilitated several group exercises that addressed site programming and user experience. Recommendations include:

True Multi-Use Trail and Nature Paths. Meet the needs of a variety of users. Incorporate loops or spurs that provide different experiences, if possible

Points of Interest with Interpretative
Signage. Design a natural winding trail with
key scenic overlooks creating upland views,
along with river's edge experience

Keep Sites Wild with Natural Feel. Site furnishings and materials should be made out of natural, local materials.

Parking. Include additional or small parking lots at trailheads for 5 or more vehicles.

Space for Shuttles/Large Trailers. Drop off area close to water is ideal, with long-term parking further away if space is limited.

Multi-Use Gathering Space. Provide outdoor area with shade for family groups, educational programming, etc.

Accessible Non-Motorized Boat Launches.
See page 44 for examples

Toilet Facilities and/or Changing Enclosure.
Include at least two stalls and one for family/
group changing. Permanent versus portable
to be determined based on site constraints,
budget, and long-term maintenance.

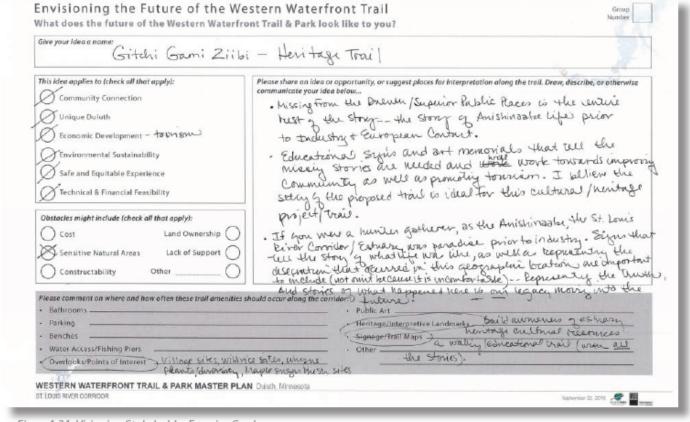


Figure 1.31 Visioning Stakeholder Exercise Card

Staging Area for larger groups (outfitting/ education). With implementation of water trail, a flat staging area for outfitting and trek preparation will be critical

 Temporary Concessions. To be used for seasonal events, such as fishing opener, race tournaments, festivals. Coordination with utilities and City rental to be further programmed. **Ecological Interpretation.** Tell the story of the area's flora and fauna through visual interpretative panels.

Pollinator/Restoration Plantings. Where invasive species are problematic, restore with native pollinator plantings for increased biodiversity. Feature in stormwater management best practices as well.

LOWER SPIRIT PROPOSED IMPROVEMENTS

Recommendations

Lower Spirit (New Park site)

The Lower Spirit Access Point along the St. Louis River Water Trail will include a new trailhead with directional signage, a drop-off point, and parking for ten cars and seven trailers. There will also be a portable tollet with a changing enclosure near the parking area. Near the drop-off, there will be a staging area for outfitting and group education. On the waterfront, there will be two beach areas; both will include shore fishing and one will include an accessible paddle sport launch. The entire project area will be completed with a landscape restoration planting.

- New trailhead with directional signage
- Drop-off and parking (10) and trailer (7)
- Portable tollet with changing enclosure
- Staging area for outfitters/group education
- Accessible paddle sport launch
- Beach access(2) with shore fishing
- Landscape Restoration Planting
- Rename the area to "Spirit Landing" to better reflect its use



- Figure 1.47
- Work with Spirit Mountain Recreation Area and other area developments to Identify opportunities for new regionally significant event staging from this location
- Work in partnership with the MN DNR on their on-going monitoring of sediment gathering and efforts to restore bathymetries in the protected bay between Tallus Island and the shoreline.
- Restore and/or preserve adjacent lands that Isn't planned for recreational

Design Concepts | Non-Motorized Watercraft Sites

Best Practices*

Accessible

- Accessible to all paddlers: slopes should not exceed 8.33%
- Between 9" and 2' from highest expected water level, at least 5' wide, preferably 6'-12'; at least 25' in length
- Handrails or other support structures are helpful
- Located in areas without heavy flow, erosion, exposure to elements, heavy boat traffic or fragile riparian habitats

Best-Suited Launch Type

 Choose most suitable type of launch for water body, climate and ecological factors

Cost Effective and Durable

 Existing natural sites are preferable, though not always durable and require reinforcement over time

Environmentally Friendly

 Low impact design and non-toxic materials protect water quality, vegetation, and riparian habitats























Launch Types*

Simple Launches

 Natural and existing shorelines, beaches and simple ramps

Floating Launches

Adjust to fluctuating water, are easily removable, provide steady surface

Pipe and Pile Launches

 Can span marshes or shallow areas to enable launching in deep enough water

Cantilever Launches

Anchored to the shoreline and extend out over the water, appearing to float - can be partially removable

Stairs

 Provide access along steep shorelines, and may be used in areas where water levels change dramatically

Concrete Launches: Ramps, Stairs, and Mats

 Can be used as launches themselves or in combination with other launches

Concrete Mats

Most practical for sites that are shared with motorized boats

Concrete Strips

Direct heavy flow or sediment loads away from launch areas

TRENDS + BEST PRACTICES: ACCESSIBLE BOAT LAUNCH FOR WATER ACCESS

Design Considerations*

Provide Access Route

- Surface, grade, width and cross slope need to be accessible (not to exceed 5% for ADA, not to exceed 8.33% for ABA), and as even and level as possible without gaps or interruptions
- Route clearly marked
- 5'minimum width

Level and stable landing/loading area

- There should be an area adjacent to the loading area that is stable, at least 60"x60"
- Can be anywhere adjacent to loading area, including in water up to 12" deep

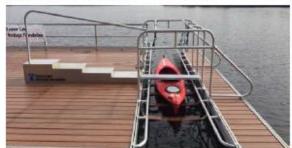
Transfer assistance

- Transfer step
- Transfer board
- Overhead handles/grab bars
- Non-slip surface textures

















Lower Spirit Mt. Riverfront Park Budget Estimate

OPINION OF PROBABLE COST: CONSTRUCTION-RELATED	
Site Preparation and Mobilization	\$22,500
Mass Earthwork and Hardscaping	\$256,800
Park Amenities	67,697
Planting & Restoration	41,550
Contingency & Design/Construction Services 87,370	
TOTAL:	\$475,917